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RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/903,199

DATE: 10/29/2001
TIME: 15:44:03

Input Set : A:\Rih32d41.app
Output Set: N:\CRF3\10292001\I903199.raw

3 <110> APPLICANT: Wands, Jack R.
4 de la Monte, Suzanne M.
5 Ince, Nedim
6 Carlson, Rolf I.
8 <120> TITLE OF INVENTION: DIAGNOSIS AND TREATMENT OF MALIGNANT NEOPLASMS
10 <130> FILE REFERENCE: 21486-032 DIV4
12 <140> CURRENT APPLICATION NUMBER: 09/903,199
13 <141> CURRENT FILING DATE: 2001-07-11
15 <150> PRIOR APPLICATION NUMBER: 09/436,184
16 <151> PRIOR FILING DATE: 1999-11-08
18 <160> NUMBER OF SEQ ID NOS: 9
20 <170> SOFTWARE: PatentIn Ver. 2.1
22 <210> SEQ ID NO: 1
23 <211> LENGTH: 36
24 <212> TYPE: PRT
25 <213> ORGANISM: Artificial Sequence
27 <220> FEATURE:
28 <223> OTHER INFORMATION: Description of Artificial Sequence: Consensus ✓
29 EGF-like domain
31 <220> FEATURE:
32 <221> NAME/KEY: VARIANT
33 <222> LOCATION: (2)..(8)
34 <223> OTHER INFORMATION: Wherein Xaa is any amino acid ✓
36 <220> FEATURE:
37 <221> NAME/KEY: VARIANT
38 <222> LOCATION: (10)..(13)
39 <223> OTHER INFORMATION: Wherein Xaa is any amino acid ✓
41 <220> FEATURE:
42 <221> NAME/KEY: VARIANT
43 <222> LOCATION: (15)..(24)
44 <223> OTHER INFORMATION: Wherein Xaa is any amino acid ✓
46 <220> FEATURE:
47 <221> NAME/KEY: VARIANT
48 <222> LOCATION: (26)
49 <223> OTHER INFORMATION: Wherein Xaa is any amino acid ✓
51 <220> FEATURE:
52 <221> NAME/KEY: VARIANT
53 <222> LOCATION: (28)..(35)
54 <223> OTHER INFORMATION: Wherein Xaa is any amino acid.
56 <400> SEQUENCE: 1
W--> 57 Cys Xaa Xaa Xaa Xaa Xaa Xaa Cys Xaa Xaa Xaa Xaa Cys Xaa Xaa
58 1 5 10 15
W--> 60 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Cys Xaa Cys Xaa Xaa Xaa Xaa Xaa
61 20 25 30
W--> 63 Xaa Xaa Xaa Cys
64 35
67 <210> SEQ ID NO: 2

ENTERED

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Input Set : A:\Rih32d41.app
Output Set: N:\CRF3\10292001\I903199.raw

68 <211> LENGTH: 758
69 <212> TYPE: PRT
70 <213> ORGANISM: Homo sapiens
72 <400> SEQUENCE: 2
73 Met Ala Gln Arg Lys Asn Ala Lys Ser Ser Gly Asn Ser Ser Ser Ser
74 1 5 10 15
76 Gly Ser Gly Ser Gly Ser Thr Ser Ala Gly Ser Ser Ser Pro Gly Ala
77 20 25 30
79 Arg Arg Glu Thr Lys His Gly Gly His Lys Asn Gly Arg Lys Gly Gly
80 35 40 45
82 Leu Ser Gly Thr Ser Phe Phe Thr Trp Phe Met Val Ile Ala Leu Leu
83 50 55 60
85 Gly Val Trp Thr Ser Val Ala Val Val Trp Phe Asp Leu Val Asp Tyr
86 65 70 75 80
88 Glu Glu Val Leu Gly Lys Leu Gly Ile Tyr Asp Ala Asp Gly Asp Gly
89 85 90 95
91 Asp Phe Asp Val Asp Asp Ala Lys Val Leu Leu Gly Leu Lys Glu Arg
92 100 105 110
94 Ser Thr Ser Glu Pro Ala Val Pro Pro Glu Glu Ala Glu Pro His Thr
95 115 120 125
97 Glu Pro Glu Glu Gln Val Pro Val Glu Ala Glu Pro Gln Asn Ile Glu
98 130 135 140
100 Asp Glu Ala Lys Glu Gln Ile Gln Ser Leu Leu His Glu Met Val His
101 145 150 155 160
103 Ala Glu His Val Glu Gly Glu Asp Leu Gln Gln Glu Asp Gly Pro Thr
104 165 170 175
106 Gly Glu Pro Gln Gln Glu Asp Asp Glu Phe Leu Met Ala Thr Asp Val
107 180 185 190
109 Asp Asp Arg Phe Glu Thr Leu Glu Pro Glu Val Ser His Glu Glu Thr
110 195 200 205
112 Glu His Ser Tyr His Val Glu Glu Thr Val Ser Gln Asp Cys Asn Gln
113 210 215 220
115 Asp Met Glu Glu Met Met Ser Glu Gln Glu Asn Pro Asp Ser Ser Glu
116 225 230 235 240
118 Pro Val Val Glu Asp Glu Arg Leu His His Asp Thr Asp Asp Val Thr
119 245 250 255
121 Tyr Gln Val Tyr Glu Glu Gln Ala Val Tyr Glu Pro Leu Glu Asn Glu
122 260 265 270
124 Gly Ile Glu Ile Thr Glu Val Thr Ala Pro Pro Glu Asp Asn Pro Val
125 275 280 285
127 Glu Asp Ser Gln Val Ile Val Glu Glu Val Ser Ile Phe Pro Val Glu
128 290 295 300
130 Glu Gln Gln Glu Val Pro Pro Glu Thr Asn Arg Lys Thr Asp Asp Pro
131 305 310 315 320
133 Glu Gln Lys Ala Lys Val Lys Lys Lys Pro Lys Leu Leu Asn Lys
134 325 330 335
136 Phe Asp Lys Thr Ile Lys Ala Glu Leu Asp Ala Ala Glu Lys Leu Arg
137 340 345 350
139 Lys Arg Gly Lys Ile Glu Glu Ala Val Asn Ala Phe Lys Glu Leu Val

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Input Set : A:\Rih32d41.app
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140	355	360	365
142	Arg Lys Tyr Pro Gln Ser Pro Arg Ala Arg Tyr Gly Lys Ala Gln Cys		
143	370	375	380
145	Glu Asp Asp Leu Ala Glu Lys Arg Arg Ser Asn Glu Val Leu Arg Gly		
146	385	390	395
148	400		
149	Ala Ile Glu Thr Tyr Gln Glu Val Ala Ser Leu Pro Asp Val Pro Ala		
151	405	410	415
152	Asp Leu Leu Lys Leu Ser Leu Lys Arg Arg Ser Asp Arg Gln Gln Phe		
154	420	425	430
155	Leu Gly His Met Arg Gly Ser Leu Leu Thr Leu Gln Arg Leu Val Gln		
157	435	440	445
158	Leu Phe Pro Asn Asp Thr Ser Leu Lys Asn Asp Leu Gly Val Gly Tyr		
160	450	455	460
161	Leu Leu Ile Gly Asp Asn Asp Asn Ala Lys Lys Val Tyr Glu Glu Val		
163	465	470	475
164	Leu Ser Val Thr Pro Asn Asp Gly Phe Ala Lys Val His Tyr Gly Phe		
166	485	490	495
167	Ile Leu Lys Ala Gln Asn Lys Ile Ala Glu Ser Ile Pro Tyr Leu Lys		
169	500	505	510
170	Glu Gly Ile Glu Ser Gly Asp Pro Gly Thr Asp Asp Gly Arg Phe Tyr		
172	515	520	525
173	Phe His Leu Gly Asp Ala Met Gln Arg Val Gly Asn Lys Glu Ala Tyr		
175	530	535	540
176	Lys Trp Tyr Glu Leu Gly His Lys Arg Gly His Phe Ala Ser Val Trp		
178	545	550	555
179	Gln Arg Ser Leu Tyr Asn Val Asn Gly Leu Lys Ala Gln Pro Trp Trp		
181	565	570	575
182	Thr Pro Lys Glu Thr Gly Tyr Thr Glu Leu Val Lys Ser Leu Glu Arg		
184	580	585	590
185	Asn Trp Lys Leu Ile Arg Asp Glu Gly Leu Ala Val Met Asp Lys Ala		
187	595	600	605
188	Lys Gly Leu Phe Leu Pro Glu Asp Glu Asn Leu Arg Glu Lys Gly Asp		
190	610	615	620
191	Trp Ser Gln Phe Thr Leu Trp Gln Gln Gly Arg Arg Asn Glu Asn Ala		
193	625	630	635
194	Cys Lys Gly Ala Pro Lys Thr Cys Thr Leu Leu Glu Lys Phe Pro Glu		
196	645	650	655
197	Thr Thr Gly Cys Arg Arg Gly Gln Ile Lys Tyr Ser Ile Met His Pro		
199	660	665	670
200	Gly Thr His Val Trp Pro His Thr Gly Pro Thr Asn Cys Arg Leu Arg		
202	675	680	685
203	Met His Leu Gly Leu Val Ile Pro Lys Glu Gly Cys Lys Ile Arg Cys		
205	690	695	700
206	Ala Asn Glu Thr Arg Thr Trp Glu Glu Gly Lys Val Leu Ile Phe Asp		
208	705	710	715
209	Asp Ser Phe Glu His Glu Val Trp Gln Asp Ala Ser Ser Phe Arg Leu		
211	725	730	735
212	Ile Phe Ile Val Asp Val Trp His Pro Glu Leu Thr Pro Gln Gln Arg		
	740	745	750

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Input Set : A:\Rih32d41.app
Output Set: N:\CRF3\10292001\1903199.raw

214 Arg Ser Leu Pro Ala Ile

215

755

218 <210> SEQ ID NO: 3

219 <211> LENGTH: 2324

220 <212> TYPE: DNA

221 <213> ORGANISM: *Homo sapiens*

223 <400> SEQUENCE: 3

224 cggaccgtgc aatggccca cgtaagaatg ccaagagcag cgccaacacgc agcagcagcg 60
 225 gctccggcag cggtgcacg agtgcggcga gcagcagccc cggggccccc agagagacaa 120
 226 agcatggagg acacaagaat gggagggaaag gcggactctc gggacttca ttcttcacgt 180
 227 gtttatggt gattgcattt ctggcgctc ggacatctgt agctgtcgtt tggttgatc 240
 228 ttgttacta tgaggaagtt ctagggaaac taggaatcta tgatgtcgat ggtgatggag 300
 229 attttgatgt ggatgtatcc aaagtttat taggactta agagagatct acttcagagc 360
 230 cagcagtccc gccagaagag gctgagccac acactgagcc cgaggagcag gttccgtgg 420
 231 aggcagaacc ccagaatac gaagatgaag caaaagaaca aattcagttcc ctttcacatg 480
 232 aaatggtaca cgccagaacat gttgagggag aagacttgc acaagaagat ggacccacag 540
 233 gagaaccaca acaagaggat gatgagtttcc ttatggcgac tgatgttagat gatagattt 600
 234 agaccctgga acctgaagta tctcatgaag aaaccgagca tagttaccac gtgaaagaga 660
 235 cagttcaca agacttaat caggatatgg aagagatgt gtctgagcag gaaaatccag 720
 236 attccagtga accagtagta gaagatgaaa gattgcacca tgatacagat gatgtacat 780
 237 accaagtcta tgaggaacaa gcagtatatg aacctctaga aatgaaggg atagaaatca 840
 238 cagaagtaac tgctccccct gaggataatc ctgtagaaga ttcacaggtt attgtagaag 900
 239 aagtaagcat ttttcctgtg gaagaacagc aggaagtacc accagaaaca aatagaaaaaa 960
 240 cagatgatcc agaacaaaaaa gcaaaagtta agaaaaagaa gcctaaactt ttaataaaat 1020
 241 ttgataagac tattaaagct gaacttgcgt ctgcagaaaa actccgtaaa agggaaaaaa 1080
 242 ttgaggaagc agtgaatgca tttaaagaac tagtacgaa ataccctcag agtccacgag 1140
 243 caagatatgg gaaggcgcag tttgaggatg atttggctga gaagaggaga agtaatgagg 1200
 244 tgctacgtgg agccatcgag acctaccaag aggtggccag cctacctgat gtcctgcag 1260
 245 acctgctgaa gctgagttt aagcgtcgcg cagacaggca acaatttcta ggtcatatga 1320
 246 gaggttccct gcttaccctg cagagatttgc ttcaactatt tcccaatgtt acttcctttaa 1380
 247 aaaatgaccc tggcggtggc tacctcttgc taggagataa tgacaatgca aagaaagttt 1440
 248 atgaagaggt gctgagttgtt acacctaattt atggcttgc taaagtccat tatggcttca 1500
 249 tcctgaaggc acagaacaaa attgctgaga gcatccccata tttaaagaa ggaatagaat 1560
 250 ccggagatcc tggcactgtt gatgggagat ttttttccca cctggggat gccatgcaga 1620
 251 gggttggaa caaagaggca tataagtggt atgagcttgg gcacaagaga ggacactttg 1680
 252 catctgtctg gcaacgctca ctctacaatg tgaatggact gaaagcacag ccttgggtgg 1740
 253 ccccaaaaga aacgggctac acagagtttgc taaagtcttt agaaagaaaac tggaaagttaa 1800
 254 tccgagatga aggccttgc gtgatggata aagccaaagg tctcttcctg cctgaggatg 1860
 255 aaaaccttag gaaaaaaaggc gactggagcc agttcacgtt gtggcagca ggaagaagaa 1920
 256 atgaaaatgc ctgcaaaaggc gctccctaaa cctgtacctt actagaaaag ttccccgaga 1980
 257 caacaggatg cagaagagga cagatcaat attccatcat gcaccccccgg actcacgtgt 2040
 258 gggccgcacac agggcccaaca aactgcaggc tccgaatgca cctgggtttt ggttccca 2100
 259 aggaaggctg caagattcga tttgccaacg agaccaggac ctgggaggaa ggcaagggtgc 2160
 260 tcacatcttgc tgactccctt gggcaggc gatggcaggat tgcctcatct ttccggctga 2220
 261 tattcatctgtt ggtatgtgtgg catccggaaac tgacaccaca gcagagacgc agccttccag 2280
 262 caattttagca tgaattcatg caagcttggg aaactctggaa gaga
 265 <210> SEQ ID NO: 4
 266 <211> LENGTH: 31
 267 <212> TYPE: PRT

265 <210> SEO ID NO: 4

266 <211> LENGTH: 31

267 <212> TYPE: PRT

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/903,199

DATE: 10/29/2001
TIME: 15:44:03

Input Set : A:\Rih32d41.app
Output Set: N:\CRF3\10292001\I903199.raw

268 <213> ORGANISM: Artificial Sequence
 270 <220> FEATURE:
 271 <223> OTHER INFORMATION: Description of Artificial Sequence: EGF-like
 272 cysteine-rich repeat
 274 <220> FEATURE:
 275 <221> NAME/KEY: VARIANT
 276 <222> LOCATION: (3)..(5) ✓
 277 <223> OTHER INFORMATION: Wherein any Xaa may be any amino acid
 279 <220> FEATURE:
 280 <221> NAME/KEY: VARIANT
 281 <222> LOCATION: (6)..(7) ✓
 282 <223> OTHER INFORMATION: Wherein Xaa is any amino acid.
 284 <220> FEATURE:
 285 <221> NAME/KEY: VARIANT ✓
 286 <222> LOCATION: (10)
 287 <223> OTHER INFORMATION: Wherein Xaa is any amino acid.
 289 <220> FEATURE:
 290 <221> NAME/KEY: VARIANT
 291 <222> LOCATION: (14) ✓
 292 <223> OTHER INFORMATION: Wherein Xaa is any amino acid.
 294 <220> FEATURE:
 295 <221> NAME/KEY: VARIANT
 296 <222> LOCATION: (17)..(18)
 298 <220> FEATURE:
 299 <221> NAME/KEY: VARIANT
 300 <222> LOCATION: (25)..(26) ✓
 301 <223> OTHER INFORMATION: Wherein Xaa is any amino acid.
 303 <220> FEATURE:
 304 <221> NAME/KEY: VARIANT
 305 <222> LOCATION: (29)
 306 <223> OTHER INFORMATION: Wherein Xaa is any amino acid.
 308 <400> SEQUENCE: 4
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 310 1 5 10 15
 W--> 312 Xaa Xaa Cys Asn Asn Ala Ala Cys Xaa Xaa Asp Gly Xaa Asp Cys
 313 20 25 30
 316 <210> SEQ ID NO: 5
 317 <211> LENGTH: 1242
 318 <212> TYPE: PRT
 319 <213> ORGANISM: Homo sapiens
 321 <400> SEQUENCE: 5
 322 Met Ala Ser Pro Pro Glu Ser Asp Gly Phe Ser Asp Val Arg Lys Val
 323 1 5 10 15
 325 Gly Tyr Leu Arg Lys Pro Lys Ser Met His Lys Arg Phe Phe Val Leu
 326 20 25 30
 328 Arg Ala Ala Ser Glu Ala Gly Gly Pro Ala Arg Leu Glu Tyr Tyr Glu
 329 35 40 45
 331 Asn Glu Lys Lys Trp Arg His Lys Ser Ser Ala Pro Lys Arg Ser Ile
 332 50 55 60

VERIFICATION SUMMARY
PATENT APPLICATION: US/09/903,199

DATE: 10/29/2001
TIME: 15:44:04

Input Set : A:\Rih32d41.app
Output Set: N:\CRF3\10292001\I903199.raw

L:57 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:60 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:63 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:309 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:312 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4